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L54 ("5692181")[PN]

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L53 6205447.pn.

L52 6212524.pn.

L51 6167405.pn.

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L50 5692181.pn.

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DB=USPT; PLUR=YES; OP=OR

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L32 L31 and (star with schema or star near schema or star adj schema or snowflake or snow with flake or snow adj flake or star-reverse-star or star-star-reverse)

L31 (datawarehouse or data with warehouse or data near warehouse or data adj warehouse or datamart or data adj mart or data near mart or data with mart)

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Jan 11, 2000

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DOCUMENT-IDENTIFIER: US 6014670 A

TITLE: Apparatus and method for performing data transformations in data warehousing

DATE-ISSUED: January 11, 2000

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Zamanian; M S Kiumarse	San Francisco	CA		
Nesamoney; Diaz	San Francisco	CA		

ASSIGNEE-INFORMATION:

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OTHER PUBLICATIONS

White, Colin. "Data Warehousing: Cleaning and Transforming Data." InforDB vol. 10 No. 6. Apr. 1997. Database Associates INT, USA. pp. 11-12. XP-002091743.

White, Colin. "Managing Data Transformations." Byte (International Edition) vol. 22, No. 12. Dec. 1997. McGraw-Hill, USA. pp. 53-54. XP002091744.

Squire, Cass. "Data Extraction and Transformation for the Data Warehouse." 1995 ACM Sigmod International Conference on Management of Data, San Jose, CA, USA, May 22-25, 1995. pp. 446-447. XP0092091745.

ART-UNIT: 277

PRIMARY-EXAMINER: Kulik; Paul V.

ASSISTANT-EXAMINER: Shah; Sanjiv

ATTY-AGENT-FIRM: Wagner, Murabito & Hao LLP

ABSTRACT:

A transformation description language (TDL) for specifying how data is to be manipulated in a data warehousing application. The TDL is comprised of a source for storing raw data, one or more transformation objects for processing the raw data according to predefined instructions, and a target for storing the processed data. A mapping is used for directing the data flow between the I/O ports corresponding to the source, the plurality of transformation objects, and the target. The mapping specifies the connectivity between the source, transformation, and target objects as well as the order of these connections. There are a number of different transformations which can be performed to manipulate the data. Some such transformations include: an aggregator transformation, an expression transformation, a filter transformation, a lookup transformation, a query transformation, a sequence transformation, a stored procedure transformation, and an update strategy transformation.

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Authors [Mark Levene](#) School of Computer Science and Information Systems, Birkbeck College, University of London, Malet Street, London WC1E 7HX, UK
[George Loizou](#) School of Computer Science and Information Systems, Birkbeck College, University of London, Malet Street, London WC1E 7HX, UK

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↑ ABSTRACT

Database design for data warehouses is based on the notion of the snowflake schema and its important special case, the star schema. The snowflake schema represents a dimensional model which is composed of a central fact table and a set of constituent dimension tables which can be further broken up into subdimension tables. We formalise the concept of a snowflake schema in terms of an acyclic database schema whose join tree satisfies certain structural properties. We then define a normal form for snowflake schemas which captures its intuitive meaning with respect to a set of functional and inclusion dependencies. We show that snowflake schemas in this normal form are independent as well as separable when the relation schemas are pairwise incomparable. This implies that relations in the data warehouse can be updated independently of each other as long as referential integrity is maintained. In addition, we show that a data warehouse in snowflake normal form can be queried by joining the relation over the fact table with the relations over its dimension and subdimension tables. We also examine an information-theoretic interpretation of the snowflake schema and show that the redundancy of the primary key of the fact table is zero.

↑ REFERENCES

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1 [W. H. Inmon, Building the data warehouse \(2nd ed.\), John Wiley & Sons, Inc., New York, NY, 1996](#)

2 [Surajit Chaudhuri, Umeshwar Dayal, An overview of data warehousing and OLAP technology, ACM SIGMOD Record, v.26 n.1, p.65-74, March 1997](#)

- 3 Ralph Kimball , Laura Reeves , Warren Thornthwaite , Margy Ross , Warren Thornwaite, The Data Warehouse Lifecycle Toolkit: Expert Methods for Designing, Developing and Deploying Data Warehouses with CD Rom, John Wiley & Sons, Inc., New York, NY, 1998
- 4 Heikki Mannila , Kari-Jouko Rähkä, The design of relational databases, Addison-Wesley Longman Publishing Co., Inc., Boston, MA, 1992
- 5 Mark Levene , M. Levene , George Loizou, A Guided Tour of Relational Databases and Beyond, Springer-Verlag, London, 1999
- 6 Matteo Golfarelli , Dario Maio , Stefano Rizzi, Conceptual Design of Data Warehouses from E/R Schema, Proceedings of the Thirty-First Annual Hawaii International Conference on System Sciences- Volume 7, p.334, January 06-09, 1998
- 7 Wolfgang Lehner , Jens Albrecht , Hartmut Wedekind, Normal Forms for Multidimensional Databases, Proceedings of the 10th International Conference on Scientific and Statistical Database Management, p.63-72, July 01-03, 1998
- 8 {8} B. Hüsemann, J. Lechtenbörger, G. Vossen, Conceptual data warehouse design, in: Proceedings of International Workshop on Design and Management of Data Warehouses, Stockholm, 2000.
- 9 Ralph Kimball , Richard Merz, The data webhouse toolkit: building the web-enabled data warehouse, John Wiley & Sons, Inc., New York, NY, 2000
- 10 Catriel Beeri , Ronald Fagin , David Maier , Mihalís Yannakakis, On the Desirability of Acyclic Database Schemes, Journal of the ACM (JACM), v.30 n.3, p.479-513, July 1983
- 11 Ronald Fagin, Degrees of acyclicity for hypergraphs and relational database schemes, Journal of the ACM (JACM), v.30 n.3, p.514-550, July 1983
- 12 Yehoshua Sagiv, A characterization of globally consistent databases and their correct access paths, ACM Transactions on Database Systems (TODS), v.8 n.2, p.266-286, June 1983
- 13 Paolo Atzeni , Edward P. F. Chan, Independent database schemes under functional and inclusion dependencies, Acta Informatica, v.28 n.9, p.777-799, Nov. 1991
- 14 Yehoshua Sagiv, Evaluation of queries in independent database schemes, Journal of the ACM (JACM), v.38 n.1, p.120-161, Jan. 1991
- 15 Edward P. F. Chan , Alberto O. Mendelzon, Independent and separable database schemes, SIAM Journal on Computing, v.16 n.5, p.841-851, Oct. 1987
- 16 Patrick O'Neil , Goetz Graefe, Multi-table joins through bitmapped join indices, ACM SIGMOD Record, v.24 n.3, p.8-11, Sept. 1995
- 17 Francesco M Malvestuto, Statistical treatment of the information content of a database, Information Systems, v.11 n.3, p.211-223, 1986
- 18 Roger Cavallo , Michael Pittarelli, The Theory of Probabilistic Databases, Proceedings of the 13th International Conference on Very Large Data Bases, p.71-81, September 01-04, 1987
- 19 Tony T. Lee, An information-theoretic analysis of relational databases—part I: data dependencies and information metric, IEEE Transactions on Software Engineering, v.13 n.10, p.1049-1061, October 1, 1987

- 20 F. M. Malvestuto, Existence of extensions and product extensions for discrete probability distributions, Discrete Mathematics, v.69 n.1, p.61-77, March, 1988
- 21 {21} D.V. Lindley, Making Decisions, Wiley, London, 1985.
- 22 Peter Honeyman, Testing satisfaction of functional dependencies, Journal of the ACM (JACM), v.29 n.3, p.668-677, July 1982
- 23 {23} F. Buckley, F. Harary, Distance in Graphs, Addison-Wesley, Redwood City, CA, 1990.
- 24 Mark Levene , George Loizou, Guaranteeing no interaction between functional dependencies and tree-like inclusion dependencies, Theoretical Computer Science, v.254 n.1-2, p.683-690, March 6, 2001
- 25 Catriel Beeri , Philip A. Bernstein, Computational problems related to the design of normal form relational schemas, ACM Transactions on Database Systems (TODS), v.4 n.1, p.30-59, March 1979
- 26 M. A. Casanova , V. M. P. Vidal, Towards a sound view integration methodology, Proceedings of the 2nd ACM SIGACT-SIGMOD symposium on Principles of database systems, March 21-23, 1983, Atlanta, Georgia .
- 27 {27} S.S. Cosmadakis, P.C. Kanellakis, Functional and inclusion dependencies: a graph theoretic approach, in: P.C. Kanellakis, F. Preparata (Eds.), Advances in Computing Research, Vol. 3, JAI Press, Greenwich, 1986, pp. 163-184.
- 28 {28} M. Levene, G. Loizou, How to prevent interaction of functional and inclusion dependencies, Inform. Process. Lett. 71 (1999) 115-125.
- 29 {29} J.R. Hill. Relational databases: a tutorial for statisticians, in: Proceedings of Symposium on the Interface between Computer Science and Statistics, Seattle, WA, 1991, pp. 86-93.
- 30 Mark Levene , Millist W. Vincent, Justification for Inclusion Dependency Normal Form, IEEE Transactions on Knowledge and Data Engineering, v.12 n.2, p.281-291, March 2000

↑ CITINGS 5

- Bernhard Thalheim, Database component ware, Proceedings of the fourteenth Australasian database conference, p.13-26, February 01, 2003, Adelaide, Australia
- Marcelo Arenas , Leonid Libkin, An information-theoretic approach to normal forms for relational and XML data, Journal of the ACM (JACM), v.52 n.2, p.246-283, March 2005
- Marcelo Arenas , Leonid Libkin, An information-theoretic approach to normal forms for relational and XML data, Proceedings of the twenty-second ACM SIGMOD-SIGACT-SIGART symposium on Principles of database systems, p.15-26, June 09-11, 2003, San Diego, California
- Antje Dürsterhöft , Bernhard Thalheim, Linguistic based search facilities in snowflake-like database schemes, Data & Knowledge Engineering, v.48 n.2, p.177-198, February 2004
- Daniel L. Moody, Theoretical and practical issues in evaluating the quality of conceptual models: current state and future directions, Data & Knowledge Engineering, v.55 n.3, p.243-276, December 2005

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General Terms:

[Design](#), [Theory](#)

Keywords:

[acyclic database schema](#), [data warehouse design](#), [independent and separable database schema](#), [star and snowflake schema](#)

↑ Collaborative Colleagues:

Mark Levene:	Judit Bar-Ilan	Boris Mirkin
	Kerima Benkerimi	Wilfred Ng
	José Borges	Rajesh Pampapathi
	José Borges	Alexandra Poulouvassilis
	Ethan Collopy	Sara Schwartz
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1 [Designing data marts for data warehouses](#)


 October 2001 **ACM Transactions on Software Engineering and Methodology (TOSEM)**,
Volume 10 Issue 4

Publisher: ACM Press

 Full text available: [pdf\(203.43 KB\)](#)

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Data warehouses are databases devoted to analytical processing. They are used to support decision-making activities in most modern business settings, when complex data sets have to be studied and analyzed. The technology for analytical processing assumes that data are presented in the form of simple data marts, consisting of a well-identified collection of facts and data analysis dimensions (star schema). Despite the wide diffusion of data warehouse technology and concepts, we still miss me ...

Keywords: conceptual modeling, data mart, data warehouse, design method, software quality management

2 [Database: A methodological framework for conceptual data warehouse design](#)



Leopoldo Zepeda, Matilde Celma, Ramón Zatarain

 March 2005 **Proceedings of the 43rd annual southeast regional conference - Volume 1 ACM-SE 43**

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A Data Warehouse (DW) has been an approach adopted for giving support to the process of taking decisions in an organization. This paper is concerned with the data warehouse conceptual schema design starting from the conceptual operational schemas and user requirements. We propose and illustrate an algorithm for automatic conceptual schema development. Our algorithm uses an enterprise schema represented with UML as a starting point for source driven data warehouse schema design and produces a set ...

Keywords: UML, multidimensional design



3 [A comparison of data warehousing methodologies](#)



Arun Sen, Atish P. Sinha

 March 2005 **Communications of the ACM**, Volume 48 Issue 3

Publisher: ACM Press

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Using a common set of attributes to determine which methodology to use in a particular data warehousing project.

4 Balancing redundancy and query costs in distributed data warehouses

Klaus-Dieter Schewe, Jane Zhao

January 2005 **Proceedings of the 2nd Asia-Pacific conference on Conceptual modelling - Volume 43 APCCM '05**

Publisher: Australian Computer Society, Inc.

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Abstract State Machines (ASMs) encourage high-level system specifications without forcing the development into the "formal methods straight-jacket". This makes them an ideal formal method for applications in areas, where otherwise only semi-formal methods are used. One such area is the development of data warehouse and on-line analytical processing (OLAP) applications to which this article contributes. Based on an ASM ground model for data warehouses we show which problems have to be solved in t ...

Keywords: abstract state machine, cost model, data warehouse, distribution, refinement

5 Articles: Reconsidering Multi-Dimensional schemas



Tim Martyn

March 2004 **ACM SIGMOD Record**, Volume 33 Issue 1

Publisher: ACM Press

Full text available:  [pdf\(163.67 KB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#)

This paper challenges the currently popular "Data Warehouse is a Special Animal" philosophy and advocates that practitioners adopt a more conservative "Data Warehouse=Database" philosophy. The primary focus is the relevancy of Multi-Dimensional logical schemas. After enumerating the advantages of such schemas, a number of caveats to the presumed advantages are identified. The paper concludes with guidelines and commentary on implications for data warehouse design methodologies.

6 Handling multiple points of view in a multimedia data warehouse



Anne-Muriel Arigon, Anne Tchounikine, Maryvonne Miquel

August 2006 **ACM Transactions on Multimedia Computing, Communications, and Applications (TOMCCAP)**, Volume 2 Issue 3

Publisher: ACM Press

Full text available:  [pdf\(586.25 KB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

Data warehouses are dedicated to collecting heterogeneous and distributed data in order to perform decision analysis. Based on multidimensional model, OLAP commercial environments such as they are currently designed in traditional applications are used to provide means for the analysis of facts that are depicted by numeric data (e.g., sales depicted by amount or quantity sold). However, in numerous fields, like in medical or bioinformatics, multimedia data are used as valuable information in the ...

Keywords: Data warehouse, OLAP, descriptor, functional version, multimedia

7 An overview of data warehousing and OLAP technology



Surajit Chaudhuri, Umeshwar Dayal

March 1997 **ACM SIGMOD Record**, Volume 26 Issue 1

Publisher: ACM Press

Full text available:  [pdf\(101.60 KB\)](#) Additional Information: [full citation](#), [abstract](#), [citations](#), [index terms](#)

Data warehousing and on-line analytical processing (OLAP) are essential elements of decision support, which has increasingly become a focus of the database industry. Many commercial products and services are now available, and all of the principal database management system vendors now have offerings in these areas. Decision support places some rather different requirements on database technology compared to traditional on-line transaction processing applications. This paper provides an overview ...

8 Industrial-strength data warehousing



Arun Sen, Varghese S. Jacob

September 1998 **Communications of the ACM**, Volume 41 Issue 9

Publisher: ACM Press


Full text available:  [pdf\(135.53 KB\)](#) Additional Information: [full citation](#), [citations](#), [index terms](#), [review](#)

9 Using abstract state machines for distributed data warehouse design

Jane Zaho, Klaus-Dieter Schewe

January 2004 **Proceedings of the first Asian-Pacific conference on Conceptual modelling - Volume 31 APCCM '04**

Publisher: Australian Computer Society, Inc.

Full text available:  [pdf\(382.76 KB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

Data Warehouses are data-intensive systems that are used for analytical tasks. As these tasks do not depend on the latest updates by transactions, data warehouses can be set up in a way that input of data from operational databases and output to dialogue interfaces for on-line analytical processes (OLAP) can be separated. In the paper we describe how abstract state machines (ASMs) can be used to design distributed data warehouses. We formalise the ground idea of data warehouses by a ground model ...

10 Towards OLAP security design — survey and research issues



Torsten Priebe, Günther Pernul

November 2000 **Proceedings of the 3rd ACM international workshop on Data warehousing and OLAP**

Publisher: ACM Press

Full text available:  [pdf\(107.83 KB\)](#) Additional Information: [full citation](#), [references](#), [citations](#), [index terms](#)

Keywords: OLAP, access control, data warehouse, design, security


11 starER: a conceptual model for data warehouse design



Nectaria Tryfona, Frank Busborg, Jens G. Borch Christiansen

November 1999 **Proceedings of the 2nd ACM international workshop on Data warehousing and OLAP**

Publisher: ACM Press

Full text available:  [pdf\(742.63 KB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

Modeling data warehouses is a complex task focusing, very often, into internal structures and implementation issues. In this paper we argue that, in order to accurately reflect the users requirements into an error-free, understandable, and easily extendable data warehouse schema, special attention should be paid at the conceptual modeling phase. Based on a real mortgage business warehouse environment, we present a set of user modeling requirements and we discuss the involved concepts. Under ...

Keywords: ER model, conceptual modeling, data warehouse, star structure

12 CubiST: a new algorithm for improving the performance of ad-hoc OLAP queries



Lixin Fu, Joachim Hammer

November 2000 **Proceedings of the 3rd ACM international workshop on Data warehousing and OLAP**

Publisher: ACM Press

Full text available: [pdf\(296.08 KB\)](#) Additional Information: [full citation](#), [references](#), [citations](#), [index terms](#)

Keywords: OLAP, data cube, data warehouse, index structure, query optimization, query processing

13 Congressional samples for approximate answering of group-by queries



Swarup Acharya, Phillip B. Gibbons, Viswanath Poosala

May 2000 **ACM SIGMOD Record , Proceedings of the 2000 ACM SIGMOD international conference on Management of data SIGMOD '00**, Volume 29 Issue 2

Publisher: ACM Press

Full text available: [pdf\(1.26 MB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

In large data warehousing environments, it is often advantageous to provide fast, approximate answers to complex decision support queries using precomputed summary statistics, such as samples. Decision support queries routinely segment the data into groups and then aggregate the information in each group (*group-by* queries). Depending on the data, there can be a wide disparity between the number of data items in each group. As a result, approximate answers based on uniform random sample ...

14 Join synopses for approximate query answering



Swarup Acharya, Phillip B. Gibbons, Viswanath Poosala, Sridhar Ramaswamy

June 1999 **ACM SIGMOD Record , Proceedings of the 1999 ACM SIGMOD international conference on Management of data SIGMOD '99**, Volume 28 Issue 2

Publisher: ACM Press

Full text available: [pdf\(1.54 MB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

In large data warehousing environments, it is often advantageous to provide fast, approximate answers to complex aggregate queries based on statistical summaries of the full data. In this paper, we demonstrate the difficulty of providing good approximate answers for join-queries using only statistics (in particular, samples) from the base relations. We propose join synopses as an effective solution for this problem and show how precomputing just one join synopsis

15 Research papers: data cleaning and mapping: Supporting executable mappings in model management



Sergey Melnik, Philip A. Bernstein, Alon Halevy, Erhard Rahm

June 2005 **Proceedings of the 2005 ACM SIGMOD international conference on Management of data**

Publisher: ACM Press

Full text available: [pdf\(408.49 KB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#)

Model management is an approach to simplify the programming of metadata-intensive applications. It offers developers powerful operators, such as Compose, Diff, and Merge, that are applied to models, such as database schemas or interface specifications, and to

mappings between models. Prior model management solutions focused on a simple class of mappings that do not have executable semantics. Yet many metadata applications require that mappings be executable, expressed in SQL, XSLT, or other data ...

16 Research sessions: continuous queries and streams: Processing complex aggregate



queries over data streams

Alin Dobra, Minos Garofalakis, Johannes Gehrke, Rajeev Rastogi

June 2002 **Proceedings of the 2002 ACM SIGMOD international conference on Management of data SIGMOD '02**

Publisher: ACM Press

Full text available: pdf(1.50 MB)

Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

Recent years have witnessed an increasing interest in designing algorithms for querying and analyzing streaming data (i.e., data that is seen only once in a fixed order) with only limited memory. Providing (perhaps approximate) answers to queries over such continuous data streams is a crucial requirement for many application environments; examples include large telecom and IP network installations where performance data from different parts of the network needs to be continuously collected and a ...

17 An information-theoretic approach to normal forms for relational and XML data



Marcelo Arenas, Leonid Libkin

June 2003 **Proceedings of the twenty-second ACM SIGMOD-SIGACT-SIGART symposium on Principles of database systems**

Publisher: ACM Press

Full text available: pdf(309.44 KB)

Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

Normalization as a way of producing good database designs is a well-understood topic. However, the same problem of distinguishing well-designed databases from poorly designed ones arises in other data models, in particular, XML. While in the relational world the criteria for being well-designed are usually very intuitive and clear to state, they become more obscure when one moves to more complex data models. Our goal is to provide a set of tools for testing when a condition on a database design, ...

18 Database design: On redundancy vs dependency preservation in normalization: an information-theoretic study of 3NF



Solmaz Kolahi, Leonid Libkin

June 2006 **Proceedings of the twenty-fifth ACM SIGMOD-SIGACT-SIGART symposium on Principles of database systems PODS '06**

Publisher: ACM Press

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Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

A recently introduced information-theoretic approach to analyzing redundancies in database design was used to justify normal forms like BCNF that completely eliminate redundancies. The main notion is that of an information content of each datum in an instance (which is a number in $[0,1]$): the closer to 1, the less redundancy it carries. In practice, however, one usually settles for 3NF which, unlike BCNF, may not eliminate all redundancies but always guarantees dependency preservation. In this pa ...

19 An information-theoretic approach to normal forms for relational and XML data



Marcelo Arenas, Leonid Libkin

March 2005 **Journal of the ACM (JACM)**, Volume 52 Issue 2

Publisher: ACM Press

Full text available: pdf(365.86 KB)

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Normalization as a way of producing good relational database designs is a well-

understood topic. However, the same problem of distinguishing well-designed databases from poorly designed ones arises in other data models, in particular, XML. While, in the relational world, the criteria for being well designed are usually very intuitive and clear to state, they become more obscure when one moves to more complex data models. Our goal is to provide a set of tools for testing when a condition on a data ...

Keywords: Information theory, XML, design, normal forms, normalization algorithms, relational databases

20 Virtual extension: Data warehousing in environmental digital libraries



Richard D. Holowczak, Nabil R. Adam, Francisco J. Artigas, Irfan Bora
September 2003 **Communications of the ACM**, Volume 46 Issue 9

Publisher: ACM Press

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IEEE JNL IEEE Journal or Magazine

IEE JNL IEE Journal or Magazine

IEEE CNF IEEE Conference Proceeding

IEE CNF IEE Conference Proceeding

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- ☐ 1. **Data warehouse design for manufacturing execution systems**
 Kai-Ying Chen; Teh-Chang Wu;
Mechatronics, 2005. ICM '05. IEEE International Conference on
 10-12 July 2005 Page(s):751 - 756
 Digital Object Identifier 10.1109/ICMECH.2005.1529355
[AbstractPlus](#) | Full Text: [PDF](#)(419 KB) IEEE CNF
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- ☐ 2. **A design and practical use of spatial data warehouse**
 Ji-man Park; Chul-sue Hwang;
Geoscience and Remote Sensing Symposium, 2005. IGARSS '05. Proceeding
International
 Volume 2, 25-29 July 2005 Page(s):4 pp.
 Digital Object Identifier 10.1109/IGARSS.2005.1525209
[AbstractPlus](#) | Full Text: [PDF](#)(311 KB) IEEE CNF
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- ☐ 3. **TSMC turnkey data mart**
 Sung-Ting Hsieh, D.; Cheng-Chin Feng, E.; Wei-Ling Liu; I-Chieh Chung;
Semiconductor Manufacturing Technology Workshop, 2002
 10-11 Dec. 2002 Page(s):267 - 270
[AbstractPlus](#) | Full Text: [PDF](#)(395 KB) IEEE CNF
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- ☐ 4. **Dynamic multi-dimensional models for text warehouses**
 Bleyberg, M.Z.; Ganesh, K.;
Systems, Man, and Cybernetics, 2000 IEEE International Conference on
 Volume 3, 8-11 Oct. 2000 Page(s):2045 - 2050 vol.3
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 5-8 Jan. 2004 Page(s):9 pp.
 Digital Object Identifier 10.1109/HICSS.2004.1265515
[AbstractPlus](#) | Full Text: [PDF\(259 KB\)](#) IEEE CNF
[Rights and Permissions](#)
- ☐ 2. **Designing data warehouses for supply chain management**
 Du, T.C.; Wong, J.; Lee, M.;
[e-Commerce Technology, 2004. CEC 2004. Proceedings. IEEE International C](#)
 6-9 July 2004 Page(s):170 - 177
 Digital Object Identifier 10.1109/ICECT.2004.1319731
[AbstractPlus](#) | Full Text: [PDF\(263 KB\)](#) IEEE CNF
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- ☐ 3. **Ad-hoc association-rule mining within the data warehouse**
 Nestorov, S.; Jukic, N.;
[System Sciences, 2003. Proceedings of the 36th Annual Hawaii International C](#)
 6-9 Jan 2003 Page(s):10 pp.
 Digital Object Identifier 10.1109/HICSS.2003.1174605
[AbstractPlus](#) | Full Text: [PDF\(439 KB\)](#) IEEE CNF
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- ☐ 4. **Active data warehousing: a new breed of decision support**
 Brobst, S.;
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 2-6 Sept. 2002 Page(s):769
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- ☐ 5. **DWS-AQA: a cost effective approach for very large data warehouses**
 Bernardino, J.; Furtado, P.; Madeira, H.;
[Database Engineering and Applications Symposium, 2002. Proceedings. Inter](#)
 17-19 July 2002 Page(s):233 - 242
 Digital Object Identifier 10.1109/IDEAS.2002.1029676
[AbstractPlus](#) | Full Text: [PDF\(351 KB\)](#) IEEE CNF

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- ☐ 6. **Experimental evaluation of a new distributed partitioning technique for d:**
Bernardino, J.; Madeira, H.;
[Database Engineering & Applications, 2001 International Symposium on, 16-18 July 2001 Page\(s\):312 - 321](#)
Digital Object Identifier 10.1109/IDEAS.2001.938099
[AbstractPlus](#) | Full Text: [PDF\(1020 KB\)](#) IEEE CNF
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- ☐ 7. **A conceptual model of data warehousing for medical device manufacture**
Lu, R.M.T.; Mazouz, K.A.;
[Engineering in Medicine and Biology Society, 2000. Proceedings of the 22nd Annual International Conference of the IEEE](#)
Volume 2, 23-28 July 2000 Page(s):1279 - 1284 vol.2
Digital Object Identifier 10.1109/IEMBS.2000.897970
[AbstractPlus](#) | Full Text: [PDF\(356 KB\)](#) IEEE CNF
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- ☐ 8. **Data Warehousing Process Maturity: An Exploratory Study of Factors Influencing Perceptions**
Sen, A.; Sinha, A.P.; Ramamurthy, K.;
[Engineering Management, IEEE Transactions on](#)
Volume 53, Issue 3, Aug. 2006 Page(s):440 - 455
Digital Object Identifier 10.1109/TEM.2006.877460
[AbstractPlus](#) | Full Text: [PDF\(744 KB\)](#) IEEE JNL
[Rights and Permissions](#)

- ☐ 9. **Controlling the data warehouse - a balanced scorecard approach**
Bensberg, F.;
[Information Technology Interfaces, 2003. ITI 2003. Proceedings of the 25th International Conference on](#)
16-19 June 2003 Page(s):127 - 135
[AbstractPlus](#) | Full Text: [PDF\(735 KB\)](#) IEEE CNF
[Rights and Permissions](#)

- ☐ 10. **The current and future role of data warehousing in corporate application**
Winter, R.;
[System Sciences, 2001. Proceedings of the 34th Annual Hawaii International Conference on](#)
Jan 3-6 2001 Page(s):8 pp.
[AbstractPlus](#) | Full Text: [PDF\(744 KB\)](#) IEEE CNF
[Rights and Permissions](#)

- ☐ 11. **Data warehouse technology in process industry**
Wang Yongsheng; Shao Huihe;
[Intelligent Control and Automation, 2000. Proceedings of the 3rd World Congress on](#)
Volume 3, 28 June-2 July 2000 Page(s):2037 - 2041 vol.3
Digital Object Identifier 10.1109/WCICA.2000.862955
[AbstractPlus](#) | Full Text: [PDF\(488 KB\)](#) IEEE CNF
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- ☐ 12. **Modeling a faster data warehouse**
Hanson, J.H.; Willshire, M.J.;
[Database Engineering and Applications Symposium, 1997. IDEAS '97. Proceedings of the International](#)
25-27 Aug. 1997 Page(s):260 - 265
Digital Object Identifier 10.1109/IDEAS.1997.625689
[AbstractPlus](#) | Full Text: [PDF\(584 KB\)](#) IEEE CNF
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- ☐ **13. Validating metrics for data warehouses**
Serrano, M.; Calero, C.; Piattini, M.;
[Software, IEE Proceedings- \[see also Software Engineering, IEE Proceedings\]](#)
Volume 149, Issue 5, Oct. 2002 Page(s):161 - 166
Digital Object Identifier 10.1049/ip-sen:20020697
[AbstractPlus](#) | Full Text: [PDF\(611 KB\)](#) IEE JNL

- ☐ **14. A method for demand-driven information requirements analysis in data w projects**
Winter, R.; Strauch, B.;
[System Sciences, 2003. Proceedings of the 36th Annual Hawaii International \(](#)
6-9 Jan 2003 Page(s):9 pp.
Digital Object Identifier 10.1109/HICSS.2003.1174602
[AbstractPlus](#) | Full Text: [PDF\(375 KB\)](#) IEEE CNF
[Rights and Permissions](#)

- ☐ **15. Parallel generation of base relation snapshots for materialized view main warehouse environment**
Saeki, S.; Bhalla, S.; Hasegawa, M.;
[Parallel Processing Workshops, 2002. Proceedings. International Conference](#)
18-21 Aug. 2002 Page(s):383 - 390
Digital Object Identifier 10.1109/ICPPW.2002.1039755
[AbstractPlus](#) | Full Text: [PDF\(285 KB\)](#) IEEE CNF
[Rights and Permissions](#)

- ☐ **16. A data warehouse for policy making: a case study**
Weilbach, J.F.F.; Viktor, H.L.;
[System Sciences, 1999. HICSS-32. Proceedings of the 32nd Annual Hawaii Ir](#)
[Conference on](#)
Volume Track7, 5-8 Jan. 1999 Page(s):8 pp.
Digital Object Identifier 10.1109/HICSS.1999.772755
[AbstractPlus](#) | Full Text: [PDF\(228 KB\)](#) IEEE CNF
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- ☐ **17. Using object deputy model to prepare data for data warehousing**
Zhiyong Peng; Qing Li; Feng, L.; Xuhui Li; Junqiang Liu;
[Knowledge and Data Engineering, IEEE Transactions on](#)
Volume 17, Issue 9, Sept. 2005 Page(s):1274 - 1288
Digital Object Identifier 10.1109/TKDE.2005.154
[AbstractPlus](#) | Full Text: [PDF\(824 KB\)](#) IEEE JNL
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Ostling, J.; Cintron-Allen, R.;
[Applications and the Internet Workshops, 2001. Proceedings. 2001 Symposiu](#)
8-12 Jan. 2001 Page(s):115 - 119
Digital Object Identifier 10.1109/SAINTW.2001.998217
[AbstractPlus](#) | Full Text: [PDF\(450 KB\)](#) IEEE CNF
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- ☐ **19. Healthcare data warehousing and quality assurance**
Berndt, D.J.; Fisher, J.W.; Hevner, A.R.; Studnicki, J.;
[Computer](#)
Volume 34, Issue 12, Dec. 2001 Page(s):56 - 65
Digital Object Identifier 10.1109/2.970578
[AbstractPlus](#) | [References](#) | Full Text: [PDF\(421 KB\)](#) IEEE JNL
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- ☐ **20. Building data warehouses with incremental maintenance for decision support**
Elamy, A.H.; Alhajj, R.S.; Far, B.H.;
[Electrical and Computer Engineering, 2005. Canadian Conference on](#)
1-4 May 2005 Page(s):1809 - 1814
Digital Object Identifier 10.1109/CCECE.2005.1557333
[AbstractPlus](#) | Full Text: [PDF\(327 KB\)](#) IEEE CNF
[Rights and Permissions](#)
- ☐ **21. Mining real estate listings using Oracle data warehousing and predictive**
Wedyawati, W.; Lu, M.;
[Information Reuse and Integration, 2004. IRI 2004. Proceedings of the 2004 IEEE](#)
Conference on
8-10 Nov. 2004 Page(s):296 - 301
Digital Object Identifier 10.1109/IRI.2004.1431477
[AbstractPlus](#) | Full Text: [PDF\(2100 KB\)](#) IEEE CNF
[Rights and Permissions](#)
- ☐ **22. Study on ocean stereo monitoring information data warehouse**
Tianhe Chi; Xin Zhang; Huabin Chen; Qinmin Wang; Chongcheng Chen; Yimin
[Geoscience and Remote Sensing Symposium, 2004. IGARSS '04. Proceedings](#)
[International](#)
Volume 3, 2004 Page(s):2182 - 2185 vol.3
Digital Object Identifier 10.1109/IGARSS.2004.1370793
[AbstractPlus](#) | Full Text: [PDF\(321 KB\)](#) IEEE CNF
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- ☐ **23. A framework for a multidimensional OLAP model using Topic Maps**
Bruckner, R.M.; Tok Wang Ling; Mangisengi, O.; Tjoa, A.M.;
[Web Information Systems Engineering, 2001. Proceedings of the Second International](#)
[Conference on](#)
Volume 2, 3-6 Dec. 2001 Page(s):109 - 118 vol.2
Digital Object Identifier 10.1109/WISE.2001.996720
[AbstractPlus](#) | Full Text: [PDF\(946 KB\)](#) IEEE CNF
[Rights and Permissions](#)
- ☐ **24. Evolving a legacy data warehouse system to an object-oriented architecture**
Filho, A.H.; Prado, H.A.; Toscani, S.S.;
[Computer Science Society, 2000. SCCC '00: Proceedings. XX International Conference](#)
[Chilean](#)
16-18 Nov. 2000 Page(s):32 - 40
Digital Object Identifier 10.1109/SCCC.2000.890389
[AbstractPlus](#) | Full Text: [PDF\(648 KB\)](#) IEEE CNF
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- ☐ **25. Materialized view design and maintenance in a financial data warehouse**
Lee, J.W.T.; Xiang Ye;
[Systems, Man, and Cybernetics, 1999. IEEE SMC '99 Conference Proceedings](#)
[International Conference on](#)
Volume 5, 12-15 Oct. 1999 Page(s):930 - 935 vol.5
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